

CLAIMS

What is claimed is:

1. An apparatus for use in an individual cell comprising:
a gasket including opposed sides about a perimeter, with the gasket including
5 at least one generally rigid bridge extending between the opposed sides.
2. The apparatus of claim 1 further including a gas diffusion layer having a perimeter, and with the gasket shaped to surround and mate with the perimeter of the gas diffusion layer.
3. The apparatus of claim 1 wherein the gasket includes a carrier layer and an
10 elastomeric seal layer mounted thereto.
4. The apparatus of claim 1 wherein the bridge is integral with the gasket.
5. The apparatus of claim 1 wherein the at least one bridge is two bridges.
6. An individual cell adapted for use in a fuel cell assembly comprising:
a membrane electrode assembly including a first gasket mounted about a first
15 gas diffusion layer and a second gasket mounted about a second gas diffusion layer;
a first separator plate including a first set of flow channels;
a second separator plate including a second set of flow channels; and
wherein the first gasket includes at least one first generally rigid bridge
extending adjacent the first set of flow channels, and the second gasket includes at least one
20 second generally rigid bridge extending adjacent the second set of flow channels.
7. The individual cell of claim 6 wherein the first generally rigid bridge is integral with the first gasket.
8. The individual cell of claim 7 wherein the second generally rigid bridge is integral with the second gasket.
- 25 9. The individual cell of claim 6 wherein the first gasket includes a carrier layer and an elastomeric seal layer mounted thereto.
10. The individual cell of claim 9 wherein the second gasket includes a carrier layer and an elastomeric seal layer mounted thereto.
11. A method of assembling a gasket to a separator plate that has fluid flow
30 channels, the method comprising the steps of:
forming a generally rigid bridge on the gasket;
locating the bridge adjacent the fluid flow channels; and
compressing the gasket against the separator plate with a sealing load.